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PERSPECTIVES ON NAZI RACISM:

AMERICAN GENETICISTS AND ANTHROPOLOGISTS, 1933-1945

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6 March 1975  
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## I. INTRODUCTION

Nazi Germany holds a special attraction for the historian. Unlike so many other areas of scholarship, the Nazi era yields readily to moral judgment, and few periods of history can be seen as clearly (and to some extent justifiably) in terms of black and white as can the regime of Adolf Hitler.

The Nazi exploitation and abuse of science is an extreme example of this point. One cannot wade through war trial transcripts or the memoirs of concentration camp survivors without passing judgment on men who maimed, tortured, and murdered in the name of science. In retrospect, Nazi racist doctrine appears crude, naive, and hopelessly unscientific; while the practices based on that doctrine can only be written off as fundamentally evil.

The weight of such moral judgments is virtually impossible to shake off, and this study by no means attempts to do that. I propose to examine the reactions of certain American scientists to Nazi race propaganda during the 1930's and '40's, and the topic itself implies a pre-conceived opinion. Possessing the enormous advantage of hindsight and the conviction that Nazi racist principles were both dangerous and unscientific, it is natural to believe that Nazi racism was, in fact, something to be reacted against. Whether or not the American scientific community of that time shared my view is the question I have set out to explore.

Certainly, scientists outside Germany saw definite ties between Nazi racist doctrine and German science. It would have been virtually impossible not to see such ties. The name of science was invoked everywhere in Nazi propaganda, and the prestige of German science was very deliberately exploited at every opportunity. Nobel prize-winners Lenard and Stark lauded the pursuit of "Aryan physics", while studies on the superiority of the Aryan race were produced by University professors of anatomy, biology, anthropology, and psychology.

That the ideas of Nazi racists demanded the attention of scientists was pointed out by Aldous Huxley: "The race theory claims to be scientific. It is surely, then, the business of science, as organized in the universities and learned societies of the civilized world, to investigate this claim."<sup>1</sup> Indeed, to the historian who is separated from these events by three decades, the issue appears even more like a challenge which needed to be met by scientists using scientific arguments. Specifically, one would expect those who studied heredity to be most outraged by brash claims of superior Aryan genes and the dysgenic effects of "polluting" the Aryan race with non-Aryan blood--claims which formed the "scientific" basis of Nazi race theories.

Outrage, however, was rarely the reaction to be seen among American scientists. The response of much of the American scientific community--and particularly the response of geneticists and those in closely-allied biological sciences--hardly suggests that the doctrine of Aryan supremacy was perceived as a critical challenge to the legitimacy of the scientific study of inheritance. Prominent geneticists who spoke publicly on a wide variety of issues were silent on the subject of Nazi racial hygiene. With

three notable exceptions, every major scientific organization in the United States failed to attack Nazi racist principles or practices on an official basis. And among those individuals who did take a firm stand against racism, the most active and most vocal scientists were more often anthropologists than biologists.

A survey of the literature on scientists' reactions to Nazi racism reveals that the bulk of anti-Nazi sentiment came from members of two particular disciplines: genetics (including zoologists involved in genetic studies), and anthropology. It is my contention that these disciplines responded differently to the issues raised by National Socialist "racial hygiene" because members of each discipline saw the issues in terms of their own particular scientific endeavors. Therefore, an understanding of scientists' responses to Nazism depends, to some extent, on an understanding of the sciences themselves as they existed in the '30's and '40's--their state of organization, the extent of their professionalization, and the types of problems with which each discipline concerned itself.

In limiting the scope of this study, I have rather arbitrarily defined what I consider to be a scientist's "reaction" in terms of publication. Books, articles in popular magazines, and newspaper articles from the New York Times comprise the bulk of my source material, as I am most interested in public response to Naze race propaganda. In collecting such material, I did extensive surveys of the Reader's Guide to Periodical Literature for the period from 1925 through 1945, and the New York Times Index for the years 1930 through 1945. Periodicals cited range

from semi-popular scientific journals such as Science to strictly non-scientific publications like Time and The Nation.

This approach, admittedly, does not exhaust all available resources. But it is, I think, extensive enough to allow specific patterns to emerge--patterns which illuminate the nature of Nazi racist dogma, American scientists' perceptions of that racism, and American scientists' perceptions of themselves and their work.

## II.

Race propaganda and the notion of the supremacy of the Aryan race were by no means new to Germany or to the rest of the world when Adolf Hitler rose to power in 1933. (The history of the doctrine of Nordic supremacy can be found in a number of excellent sources and need not be discussed here.<sup>2</sup>) But it was only in the years immediately preceding the Nazi take-over that such racist concepts began to move from the periphery toward the center of biological thought and to receive the kind of scientific support which these ideas enjoyed throughout the Nazi period.

A landmark in the history of "scientific racism" in Germany was the publication in 1927 of the noted text, Menschliche Erblehre, by Erwin Baur, Eugen Fischer, and Fritz Lenz.<sup>3</sup> This is an excellent example of the extent to which racist doctrines had achieved a degree of legitimacy among biological scientists by the end of the Weimar era. The book was hailed by American geneticist H.J. Muller as "the best work on the subject of human heredity which has yet appeared."<sup>4</sup>

But Muller was speaking only of the first section of the book on the principles of human heredity, written by Baur. Baur was one of the most prominent European geneticists of his day, and his discussion of human heredity in this text is rigorously scientific. However, Eugen Fischer, Professor of Anatomy at Freiburg, allowed his racist views to creep into the second section of the book, insisting that "there is no such generalised being as 'man'; there are only men and women belonging to particular races or particular racial crossings."<sup>5</sup> And the third portion of Menschliche Erblehre, which comprised five hundred of the book's seven hundred pages, was devoted entirely to a "scientific" justification of blatantly racist views on Aryan supremacy and non-Aryan degeneracy. This massive section was written by Fritz Lenz, then Professor of Racial Hygiene at the University of Munich. Lenz based his work on the assumption that, "what is known as personality or individuality has undergone its fullest development among the Nordics,"<sup>6</sup> and his chapters on racial hygiene correlated the supposed physical degeneracy of Orientals, Negroes, and similar groups with their "inferior" mental capabilities. He traced the effects of these racial differences to all facets of life, including politics and crime: "In countries of Europe which are predominantly inhabited by Nordics, life and property are much more secure than in the southern countries of the European continent."<sup>7</sup>

The somewhat awkward marriage of human genetics and human biology with "racial science"--to be consummated four years later--is clearly proposed in this one book. That a highly respected geneticist, a professor of anatomy, and a violently racist "hy-

gienist" should deem it proper to combine their work under the label of "human heredity" is itself an important step. And that the book enjoyed the status of the major text on the subject in Germany at that time provides an even better indication of trends in racial and biological thought during the Weimar era.

While discussions of racial hygiene, the degeneracy of Aryan stock, and the possibility of eugenic sterilization and selective breeding were to be found everywhere in German medical and scientific literature prior to 1933, only Nazi determination and organization could forge the many theories and proposals into a program of widespread action. In July of 1933, the Reichstag passed the Gesetz zur Verhütung erbkranken Nachwuchses (Act for averting descendants afflicted with hereditary disease), permitting the state to require the sterilization of those individuals "who could be confidently expected to transmit serious physical or mental defects to their descendants."<sup>8</sup> Those falling into this category included schizophrenics, manic-depressives, epileptics, and chronic alcoholics. The law was put into effect almost immediately, and Nazi officials estimated at the time that 62,463 persons were sterilized in 1934 and that the figure climbed to 71,760 in 1935.<sup>9</sup>

Compulsory sterilization was certainly the most dramatic of the practices based on Nazi race doctrines, and it was not until 1939 that further decisive action came. In that year, the short-lived "euthanasia" program was established, in which hopelessly ill patients in various German institutions were secretly murdered to decrease the burden of the sick on society. Word of this program soon leaked out of confidential government and med-

ical circles, and protest from the Catholic clergy of Germany was largely responsible for putting an end to such "euthanasia". The final chapter of Nazi racism took place in the concentration camps after 1941--the calculated destruction of six million Jews, as well as millions of other Europeans, in the name of racial hygiene.

These, very briefly, are the ideas and events which the rest of the world saw as the core of Nazi racism from the end of the Weimar era to the end of World War II. It is important to note that, up to 1933, German racial hygiene consisted of nothing more than discussion, while action began on July 14, 1933 with the compulsory sterilization law.

It would be impossible to get a sense of how these developments in Germany affected American scientists without a brief discussion of American racial thought in the period before the Nazi take-over. While Baur, Fischer, and Lenz collaborated on their textbook in Germany, American scientists attempted to formulate opinions on many racial issues. Heated debates raged over the question of whether growing numbers of Americans in state institutions was indicative of some sort of biological degeneracy. Acutely aware of the frenetic pace at which industrialization had transformed American society, men like Harvard geneticist Edward M. East began to draw ominous conclusions about the fitness of the population for survival in the new age: "Half the people in the world lack sufficient brains to cope with the intricate system of social life the industrial age has brought about."<sup>10</sup> The new field of intelligence testing yielded mountains of raw data on the intelligence of various racial, ethnic, and socio-



economic groups, and the debate about the existence of mental differences among races was carried on all over America. No less prominent a figure than geneticist C.B. Davenport reviewed a variety of intelligence test results and, in 1928, he publicly declared: "We have to conclude that there are racial differences in mental traits."<sup>11</sup>

Much of the American discussion of race during the late '20's and early '30's was directed toward two very immediate concerns: the American Black and the control of immigration. The controversy centered not only around racial differences in mental abilities, but also around the question of whether the cross-breeding of different races produced physical "disharmonies". Charles Davenport insisted that physical disharmonies did result from race crossing, while W.E. Castle, also a geneticist, insisted with equal vehemence that they did not. Castle cut to the heart of the issue as he attacked Davenport's views in Science in 1930:

We like to think of the Negro as inferior. We like to think of Negro-white crosses as a degradation of the white race. We look for evidence in support of the idea and try to persuade ourselves that we have found it even when the resemblance is very slight.<sup>12</sup>

Their debate on this issue was fairly famous, and scientists joined in the support of both sides. Thus, while German scientists worried about the possible degeneracy of the Aryan race, many in the U.S. feared for the racial purity of white America. Prominent American scientists--particularly geneticists, psychologists, and anthropologists--were caught up in these disputes and unable to resolve them with anything resembling conclusive

evidence.

At the time when Germans were toying with the idea of eugenic sterilization, Americans had already put compulsory sterilization laws on the books in twenty-four states.<sup>13</sup> To be sure, these laws of the 1910's and '20's were rarely enforced, poorly designed, and often more punitive than eugenic in purpose, but their existence is indicative of the fact that Americans had come to accept as reasonable the notion of control of reproduction by the state for the good of society.

Even the concept of Nordic supremacy--the heart of Nazi race doctrine--was a very legitimate topic of discussion among American scientists prior to 1933. Edward M. East was convinced of the supremacy of the Nordic peoples, and he presented elaborate arguments and social-scientific statistics to support this claim in his book, Mankind at the Crossroads, in 1924.<sup>14</sup> A.F. Shull, also a geneticist, attacked this notion with equal conviction in his book, Heredity, published in 1931.<sup>15</sup> The point here is that those race questions which plagued Weimar Germany were the same ones that occupied the thoughts of many fine American scientists. On no single point with respect to any of these issues could American science speak with one voice.

Despite this lack of consensus on issues of race, many scientists outside Germany found the growing tide of German "scientific" racism very disturbing, and they took the Baur-Fischer-Lenz text as exemplary of this trend. H.J. Muller expressed this concern in his review of the book in the Birth Control Review:

The fact that this is the best work on the subject of human heredity which has yet appeared emphasizes only the more strongly the need for more extensive and in-

tensive research and for more scientific methods of reasoning in this vitally important field.<sup>16</sup>

Muller lamented the fact that Fischer and Lenz acted as mere "mouthpieces for the crassest kind of popular prejudice",<sup>17</sup> and in evaluating their racist theories insisted that "there is not one iota of evidence from genetics for any such conclusions, and it is too bad to have them issued with the apparent stamp of genetic authority."<sup>18</sup> Responding in 1932 to the bold claims for racial inequality advocated by Fischer and Lenz, social biologist Lancelot Hogben concluded: "How far racial differences of temperament are inborn and how far the product of culture we cannot decide."<sup>19</sup>

Uneasiness, uncertainly, and widely-admitted ignorance are characteristic of the attitudes of many U.S. scientists toward race prior to 1933. American responses to the publication of Menschliche Erblehre reflect those trends, and are dominated by an atmosphere of cautious reserve.

### III.

Having sketched out very roughly the context in which Americans would have read Nazi racist propaganda, we may proceed to discuss the Nazi period itself. I propose to outline two separate sets of responses to the racism of the Third Reich: the responses of geneticists, and those of anthropologists.

Geneticists were definitely aware of the direction in which racism was heading in Germany at the time of Hitler's rise to power. Late in 1932, J.B.S. Haldane addressed the Sixth Inter-

national Congress of Genetics at Cornell and expressed concern over the increasingly popular ideal of a biological utopia. In this decidedly non-scientific discussion, Haldane declared that an ideal society must have room for all sorts of people, "each best at something or other."<sup>20</sup> By 1934, Haldane was explicitly attacking Nazi race theories from the lecture platform at various scientific gatherings, but his arguments did not draw on genetics or biology for support.<sup>21</sup>

In 1935, Julian Huxley wrote for Harper's on "The Concept of Race in the Light of Modern Genetics," but he could come up with no real positive scientific arguments in his attack on Nazi policies. The most that he could do was plead ignorance for himself and the entire scientific community: "Until we have invented a method for distinguishing the effects of social environment from those of genetic constitutions we shall be unable to say anything of scientific value on such vital topics as the possible genetic differences in intelligence, initiative, and aptitude which may distinguish different human groups."<sup>22</sup>

In 1936, Huxley wrote a "survey of racial problems" with A.C. Haddon entitled We Europeans, and in this influential book he went so far as to disclaim the relevance of genetics and biology to the race controversy. "The question of 'race-mixture' turns out not to be primarily a matter of 'race' at all, but a matter of nationality, class, or social status."<sup>23</sup> He insisted that the Nazis' equation of "race" with "nation" was merely the confusion of a genetic and a social concept.<sup>24</sup>

Dr. Lawrence Snyder, a geneticist and President of the Eugenics Research Association, told that organization in 1938

that the current world-wide conflicts over racial qualities and inherited human characteristics had originated in purely social philosophies. Snyder remarked that while he and his fellow geneticists were being drawn into these controversies, they came armed with little in the way of scientific knowledge. He urged geneticists to formulate a broad, comprehensive program of research designed "to lay an adequate foundation of knowledge of inheritance in man."<sup>25</sup>

These are typical of the positions taken publicly by geneticists through the late 1930's, when the Second World War was yet to take place and Nazi racial hygienists had yet to devise anything more drastic than a program of eugenic sterilization. With the advent of the War, geneticists spoke less about scientific misunderstandings and more about patriotism when they attacked Nazi racism. Geneticist A.F. Blakeslee, President of the American Association for the Advancement of Science, addressed that organization in 1942 in a tone very different from that of his colleagues five years earlier:

Opposition to totalitarianism is not merely because it attacks man's rights but also because it suppresses his personality. Individuality is the kernel of democracy, the biological basis of the struggle for freedom. When we fight for individuality we fight on the side of nature.<sup>26</sup>

It is true that a very few geneticists did use scientific principles and data as the basis for their anti-racist arguments. Otto Mohr is a case in point, and his 1934 article on "Heredity and Human Affairs" in Forum was a serious attempt to get at the problems of Nordic supremacy and eugenic sterilization from a genetic angle.<sup>27</sup> Lawrence Snyder may also be credited with using

his science as a positive weapon to attack Nazi racism in an article published in Scientific Monthly in 1940.<sup>28</sup> But these are exceptions to the rule. Those geneticists who did speak out against biological racism in books and periodicals, or at scientific conferences, tended for the most part to seek their justifications outside of the area of genetics. When they did invoke the principles of heredity, it was only to plead that genetics could neither refute racist theories nor support them.

Also important is the fact that many prominent geneticists said absolutely nothing in response to Nazi claims. Men like Theodosius Dobzhansky, a geneticist of strong moral convictions on the subject of racial equality, discussed the biological concept of race only in the most abstract terms, if at all, refusing to speak directly to the issues raised by the Nazis or to condemn National Socialist race doctrine in public.<sup>29</sup>

Articles and speeches by geneticists on the subject of Nazi racism are, in general, rather sparsely scattered through the literature of the 1930's and early '40's. A handful of geneticists account for the majority of these writings, and the nature of this particularly vocal group will be discussed later.

#### IV.

Even the most cursory perusal of American periodical indices and bibliographies on race during the Nazi era shows clearly the prominent role played by U.S. anthropologists in the refutation of racist theories emerging from the Third Reich. Anthropologists entered into the debate from the very beginning, and a sizeable number of them remained active and vocal on the subject from 1933

right through until the end of the War. Their arguments against Aryan supremacy and Nazi racial hygienic theory, like those of the geneticists, reflect profound uncertainty and the fear of lapsing into the sort of unscientific dogmatism over race questions which they so despised in Nazi propaganda. But there are important differences between the protests of anthropologists and those of geneticists. More anthropologists than geneticists seem to have been involved in public condemnation of Nazi doctrine, and this larger group of spokesmen made themselves heard more often than did the geneticists during the Nazi years. And while many geneticists concerned themselves with the more abstract aspects of heredity and race, anthropologists were more intent in their arguments on directly refuting Nazi doctrines.

American anthropologists greeted National Socialist racial hygiene with a fair amount of open disgust. M.F. Ashley Montagu, anatomist and anthropologist, published a book on race in 1942 in which he termed Nazi race doctrine "the most ludicrous and vicious mythology that has ever been perpetrated upon a people."<sup>30</sup> And long before 1942, one finds epithets like "preposterous", "naive", and "nonsensical" recurring constantly throughout the literature.

But in addition to widespread outrage among U.S. anthropologists, there is a definite attempt to deal with Nazi propaganda unemotionally in terms of anthropological science. The favorite tactic was to give an anthropologist's definition of the term "race" and then show this to be incompatible with Nazi theories. In his 1936 article in Science entitled "Plain Statements About Race", Harvard's Earnest Hooton reminded his readers that "race is essentially a zoological device whereby indefinitely large groups of similar

physical appearance and heredity background are classified for the sake of convenience."<sup>31</sup> Dr. Fay-Cooper Cole, of the University of Chicago, told the New York Times in 1935 that, "There is no German race. . . . Neither is there an Aryan race, as Herr Hitler is now trying to call the Nordics. Aryan is a linguistic term."<sup>32</sup>

Hooton expanded on Cole's line of thought, explaining that "Race is not synonymous with language, culture, or nationality. Race is hereditary; language is a cultural acquisition. . . . Aryan is a term applicable only to a family of languages spoken by populations heterogeneous in race, nationality, and religion."<sup>33</sup> According to Hooton, "A 'pure' race is little more than an anthropological abstraction; no pure race can be found in any civilized country."<sup>34</sup> This opinion was echoed by anthropologists like Franz Boas, Ruth Benedict, A.C. Bowden, and W.M. Krogman throughout the Nazi period.<sup>35</sup>

With respect to the issue of race-crossing, arguments that race-crossing is not harmful in man were based less on semantics and more on data from anthropological studies. After citing numerous examples of harmless race crosses in a 1934 discussion in Scientific Monthly, Melville Herskovits felt confident enough to end the article on the following note: "That race-crossing, then, does not of itself make for either good or evil results in the offspring would seem to be a tenable conclusion."<sup>36</sup> Citing his own studies of half-castes among various populations, Ashley Montagu derided Nazi propaganda on the ill effects of inter-racial breeding. He told a 1942 meeting of the American Association of Physical Anthropologists that, "The data reveal the fact that human hybridization very rarely results in unfavorable effects."<sup>37</sup>



Surely the greatest champion of the fight against Nazi racism to emerge from the American scientific community was Franz Boas. One of the founding fathers of anthropology in this country, Boas made a point of carrying his campaign against biological racism to as many people as possible. As early as 1925, he wrote a scathing attack on the anti-immigrationist doctrine of Nordic supremacy for Forum Magazine.<sup>38</sup> Long before the War began, he was the chairman of the American Committee for Anti-Nazi Literature, an organization which published propaganda and smuggled it into Germany.<sup>39</sup> Boas made it a point to speak to many different groups of people, lecturing the American Association for the Advancement of Science on racial prejudice in 1931,<sup>40</sup> debunking Nazi race ideas in a message to the World Congress on Populations in Paris in 1937,<sup>41</sup> and even giving talks on the evils of racism in the Science and Education Building of the 1939 World's Fair.<sup>42</sup>

Boas, the eloquent spokesman for his discipline and for many outside of the field of anthropology, became more and more disheartened as he saw the Nazis prosper and their racist dreams become realities in the Third Reich. When he resigned his professorship of anthropology at Columbia in the summer of 1936, he declared that he was resigning in a "sick world". He bitterly attacked Nazi racists and announced his refusal to go to Heidelberg for the coming celebration of the 550th anniversary of that institution.<sup>43</sup> His resignation from Columbia did not mean the end of his anti-racist activities, however. In fact, he was then left with more free time to work harder in his campaign against Nazism.

Several anthropologists--and one of Boas' students among them--were not afraid to gather support from other sciences to legitimize their arguments against biological racism. Ruth Benedict's book, Race: Science and Politics, appeared in 1940 and relies heavily in parts on the fundamental principles of heredity. She devotes an entire chapter to the question, "What Is Hereditary?" and concludes from her discussion of genetics that race crossing is not harmful. Like so many anthropologists, Benedict was eager to denounce the notion of Aryan supremacy as a facile answer to the nature-nurture controversy: "Heredity takes no notice of the glories of civilization, whether they are in science or in technology or in art; these can be perpetuated in any group, not by nature, but by nurture."<sup>44</sup>

Like Benedict, Ashley Montagu availed himself of genetics as well as anthropology in his attack on Nazi racism in Man's Most Dangerous Myth (1942). Chapter titles of this book include "The Meaninglessness of the Anthropological Conception of Race", "The Genetical Theory of Race", and "The Biological Facts."<sup>45</sup> This is a book for the layman, but the discussion is very firmly grounded in science, albeit somewhat simplified science.

In 1943, two University of Chicago anthropologists attempted to assess the state of knowledge at that time on questions of race. W.M. Krogman published an article in Scientific Monthly entitled "What We Do Not Know About Race" in August of 1943, and Robert Redfield published a sequel--"What We Do Know About Race"--in the very next issue. Krogman listed six major "don't know's" in scientific understanding of race, including the fact that scientists could not agree on what actually constitutes a bio-

logical race in man, and the fact that no one knew of any "characteristics, either biological or psychological, that in a given race-cross are superior or inferior."<sup>46</sup>

Redfield's were the more positive arguments. He asserted, first of all, that "The biological differences which enable us to classify the human species into races are superficial differences. There are few racial differences deep inside our bodies."<sup>47</sup> Not only were these biological differences confined to the body surface, according to Redfield, but they had no influence on the progress of society: "The physical characteristics used by anthropologists to classify people racially have, so far as we know, practically no significance for cultural achievement."<sup>48</sup>

These two articles summarize nicely the tactics of criticism which anthropologists adopted in the face of Nazi propaganda. On one hand, we find the sort of guarded "we-don't-know" arguments which placed the burden of proof on scientists of the future; but on the other hand there are positive and confident refutations of Nazi doctrine based on anthropological science and the rudimentary principles of inheritance.

We have thus far dealt only with the reactions of individuals to Nazi racism. It is important to remember, however, that American science was well-organized in the '30's and '40's, and that the many scientific congresses held each year in this country during the Nazi era afforded ample opportunity for American scientists to respond as a group to political issues which concerned them. The fact that some groups did speak out against the Nazis while most were silent is significant.

The first group to issue a statement regarding Nazism consisted of 1284 American scientists who signed what came to be known as the "Scientists' Manifesto" late in 1938. The signatures came from every major scientific discipline and all levels of the scientific and academic hierarchies in the United States. Responding to an article published in the April, 1938 edition of Nature that dealt with so-called "Aryan physics", the Manifesto unequivocally attacked Nazi racist doctrines and repression of science: "we publicly condemn the Fascist position towards science. The racial theories which they advocate have been demolished time and again."<sup>49</sup>

This declaration of concern by scientists over recent political developments was looked upon as an event of some note by many in the United States. The editors of the New Republic were particularly impressed by this statement of the scientists' position:

The fact that so many of these eminent individuals, who are not in the habit of entering the realm of public controversy, feel impelled to speak out at this time shows how seriously Americans are taking the Nazi threat to civilization. It shows too the growing realization that nobody can any longer afford to remain 'above the battle.' The scientists have come down out of their ivory towers and enlisted in a struggle which involves nothing less than the survival of civilization.<sup>50</sup>

This is a very interesting reaction, given the fact that individual scientists had "come down out of their ivory towers" and spoken publicly on controversial political questions involving race for more than twenty years before the Manifesto was issued.

It is true, nevertheless, that the opinions of scientists speaking as professionals and as a group would have carried far more weight and attracted more attention than individual opinions.

But the Manifesto is hardly a direct condemnation of Nazi biological racism. The document is really a protest against the infringement of politics upon science. "Science," say the Manifesto authors, "is wholly independent of national boundaries and races and creeds and can flourish only when there is peace and intellectual freedom."<sup>51</sup> At the heart of their grievances lay the Nazis' dismissal of more than 1600 German scientists and teachers who were judged to lack the "proper" racial and political qualifications to continue their work in universities and research institutes. Racism was mentioned only insofar as it pertained to the structure of the German scientific community and to scientific principles. The Manifesto was also anything but timely. The blatant repression of science and the persecution of scientists which so upset the signers of the Manifesto had begun a full five years before this statement was issued.

While the Scientists' Manifesto did not address Nazi biological racism directly, it did serve to legitimize large-scale anti-Nazi protests by scientific organizations after 1938. And only a few weeks after the Manifesto was issued, the American Anthropological Association came out with a formal condemnation of Nazi race doctrine, deploring what it termed "the cause of an unscientific racialism."<sup>51b</sup> Thus, anthropology was the first scientific discipline to commit its members, as a group, to a stand against Nazi racism. At the Eighth American Scientific Congress in May of 1940, it was the delegation of anthropologists

that introduced a resolution condemning the doctrine of race as scientifically untenable.<sup>52</sup> And in November of 1942, a second anthropological organization--the American Ethnological Society--issued a statement which unequivocally denounced Nazi racism and "the dogma that civilization depends upon the enslavement of one race by another."<sup>53</sup>

Unlike the anthropologists, geneticists did not take any cues from the Scientists' Manifesto. At the 1939 International Congress of Genetics, not one paper is reported to have been read on issues of race or Nazi racial hygiene, nor did any resolutions dealing with political issues emerge from the conference.<sup>54</sup> (This is in contrast to earlier Genetics Congresses, at which anti-racist sentiments had been expressed in several papers.) What did come out of the 1939 Genetics Congress was a rather innocuous statement dealing with the question, "How could the world's population be improved most effectively genetically?"<sup>55</sup> The authors of this statement--mostly geneticists--included such prominent men as Julian Huxley, H.J. Muller, Theodosius Dobzhansky, and J.B.S. Haldane. Their prescription for a better world did not so much as hint at the political struggles going on around them--struggles based, in part, on the Nazis' desire to improve the world population genetically. The declaration spoke of such things as the need to improve social conditions, the need to agree upon the goals toward which selective breeding would be directed, and the need for further research in the area of human genetics.<sup>56</sup> Clearly, the geneticists of the United States did not make the same sort of professional commitment to the opposition of Nazism that was made by American anthropologists.

VI.

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Judged from a "distance" of three decades, the history of scientific opposition to Nazi racism is not a glorious one. Geneticists, in particular, do not present a very inspiring picture. But it would be useful at this point to recall the initial assumption upon which this study is based. We assumed from the start that Nazi racism was seen by Americans as something to be opposed from the time of its birth. That, however, is a modern-day assumption, based on an unequivocal moral imperative to oppose racism in all of its forms; and it is all too easy to foist that imperative onto the past in ways which are totally inappropriate.

Obviously, it is not the liberal imperatives of the 1970's, but the imperatives sensed by American scientists in the '30's and '40's which we want to explore. For while vague notions of social responsibility are tempting to invoke here, we must remember that a scientist who opposed the Nazis made an investment of his time, his energy, and his professional reputation--investments which had to be prompted by something more compelling than vague pangs of conscience.

In fact, it may be argued that geneticists and anthropologists responded differently to the issues of biological racism during the Nazi era precisely because their sciences dictated very different imperatives for social action.

It is easy enough to dispel the notion that the American public handed its scientists a clear mandate to oppose Nazi racism. As was discussed above, the Nazis did not introduce biological

racism to Germany. As German ideas on the subject had been aired around the world long before Hitler took power, it would have been very difficult for Americans in 1933 to perceive Nazi racism as something particularly new or more threatening. Also, Americans had their own unresolved race problems with which to contend in 1933. Anti-immigrationists continued to justify their isolationist policies in terms of supposed racial inequalities, guilt-ridden scholars were using the new-found tools of psychological testing to uncover some hereditary justification for the plight of the Black American, and compulsory sterilization laws were still on the books in a majority of states. Until 1939, Nazi racism took no more evil a form than racial discrimination and compulsory sterilization, so it would have been difficult to condemn racism abroad without touching sensitive cords at home. Some, like Franz Boas, drew the connections between Nazi and American racism all too explicitly:

The crudest form of racial consciousness is at present confined to Germany--although with respect to stronger divergences, such as those between Negroes or Asiatics and whites, it is almost equally potent in the United States and England, mitigated by a hypocritical desire to avoid legal recognition of the facts.<sup>57</sup>

One could hardly issue a self-righteous condemnation of German racism without falling into the trap of hypocrisy, and in 1933, when some Nazi race doctrines seemed more progressive than sinister to heredity-conscious Americans, few in this country were prepared to "cast the first stone."

That the scientist actually risked severe criticism at home when he condemned Nazi policies in the early years of the Third



Reich is evidenced by this comment from Earnest Hooton's "Plain Statements About Race":

I do not claim to speak for all physical anthropologists, many of whom are either too wise or too timid to speak at all upon this subject, preferring to pursue their researches in academic seclusion, rather than cry their wares in the market place and run the risk of being pelted by the rabble. For myself, I prefer to be the target of rotten eggs, rather than be suspected as a purveyor of that odoriferous commodity. [i.e., racism] 58

It is no wonder that the strongest arguments used by many public critics of the Nazis were simply statements of scientific ignorance, particularly in the pre-War days of the Nazi regime. "I regret as much as anyone else," said J.B.S. Haldane, "the impossibility of coming to any reasoned conclusion on this question of racial intermixture."<sup>59</sup> Such a position allowed the scientist to dodge the "rotten eggs" from home and charges of hypocrisy from abroad.

If we discount the possibility that social imperatives provided the impetus for protest from scientists, we must look to the sciences of genetics and anthropology themselves for possible imperatives. The problems which each discipline tackled, the degree to which those disciplines were accepted as legitimate branches of the American scientific community, and the extent to which Nazi racism infringed upon the respective "territories" of these sciences--all affected the way in which individual scientists viewed the challenge of Nazism.

Genetics provides a particularly interesting case. The work of Gregor Mendel was re-discovered in 1900, and the community of geneticists which sprang up in the United States in the next two

decades.was dominated by men concerned with the possibility of using new-found knowledge of heredity to better the lot of mankind. As Dunn points out, genetics grew up in a eugenics environment, and the two subjects were frequently taught by the same persons.<sup>60</sup> This had a very definite influence on the directions which genetics research took in these early years. Geneticists focused their attention almost entirely on man, and as Charles Rosenberg points out, "the very attitudes which inspired scientists to apply Mendelianism immediately to the inheritance of human traits, made an objective study of these traits impossible. To many of the early workers in the field, human genetics was indistinguishable from eugenics; their findings were blueprints for social action."<sup>61</sup>

Thus, in its infancy, American genetics was very much concerned with the questions to which the Nazis were later to provide "answers". But human beings proved to be more complicated research subjects than Mendel's plants, and geneticists began to realize that the formulation of universally-accepted goals for eugenic reform was by no means an easy task. According to Rosenberg, geneticists began to grow disillusioned with human genetics after several years, and "the comparatively cautious hopes of such scientists were soon outstripped by their less knowledgeable fellow eugenisists. It was their misplaced enthusiasm . . . which made human genetics an object of increasing suspicion in academic circles."<sup>62</sup>

By 1930, the attention of large numbers of geneticists had shifted away from man, and what were once strong ties between genetics and eugenics had dissolved. Scientists turned to the

study of genetics at the cellular level, correlating cytological observations with knowledge gleaned from experimental breeding work. The use of Drosophila and the artificial induction of mutations by X-rays opened up vast new areas of research, and the optimism which had once pervaded the field of human genetics was now reserved for other projects.

Had the Nazis dominated Germany twenty years earlier, American geneticists might very well have responded more forcefully to the notion of biological racism than they did in 1933. But by the time that Hitler took power, few Americans were left in the field of human genetics. Nazi claims about racial degeneration and dysgenic race mixtures could not have been further from the scientific concerns of men who worked with fruit flies. Engaged in research which was both exciting and rigorously scientific, American geneticists could not have seen Nazi "ravings" about eugenics as a real challenge either to the science or to the profession of genetics in America. The pattern of geneticists' responses to Nazi biological racism confirms this statement, as nowhere in their speeches or writings do they feel the need to defend their commitment to the scientific study of inheritance.

A handful of men were responsible for most of the anti-Nazi propaganda which came from the community of American geneticists during the years of the Third Reich. And what is interesting to note is that many of these individuals had particular motives for opposing the Nazis--motives which had little to do with the science of genetics per se. For example, the highly vocal H.J. Muller spoke against the Nazis primarily in political rather than scientific terms because, as a confirmed Marxist, he was most con-

cerned with the political implications of biological racism.<sup>63</sup>

In addition to politics, eugenics exerted a strong influence on many within this small, vocal group of geneticists. Of course, as was previously mentioned, the strong ties between eugenics and genetics which existed at the beginning of the 20th century had been broken by 1933. But some geneticists held on to their eugenic ideals. Prominent in this group were Lawrence Snyder, C.B. Davenport, Julian Huxley, and J.B.S. Haldane--the very men whose names dominate the literature of anti-Nazi protest.

The idea that eugenics sympathies would prompt these geneticists to speak out against the Nazis is not surprising. The "science" of eugenics was in trouble. Its scientific foundation was being undermined as more and more geneticists left the field of human genetics and ceased to publish on eugenics-related subjects. Finally, by 1938, geneticist Frank R. Lillie told a meeting of the American Association for the Advancement of Science that eugenics was not a practicable program due to the dearth of knowledge in the area of human genetics.<sup>64</sup> Some geneticists clearly wished to put eugenicists out of business.

Nazi propaganda on racial purification could not help but undercut the legitimacy of the American eugenics movement even further in the eyes of those who found Nazi racism distasteful. In fact, there are several instances in the literature where eugenics and Nazism are implicitly equated by American writers. For example, Harold Ward's summary of research trends in genetics dealt with the potential uses of the new technique of chromosome mapping, and Ward looked to these maps to assist science in correcting "the emotional bigotries of current eugenic beliefs

by constantly increasing knowledge of the quantitative physical factors behind such dangerous generalizations as 'character', 'temperament', 'personality', and the like."<sup>65</sup>

In the face of rapidly-diminishing scientific support and unwanted identification with Nazi racism, the American eugenics movement consciously strove to maintain its integrity by publicly denouncing National Socialist policies. That geneticists with eugenic ideals were particularly active in the fight against Nazi racism is therefore understandable.

Anthropology presents a similar case. While geneticists were fairly secure in their professional status by 1933 and were clearly accepted in the scientific community as legitimate scientists, anthropology was still in the process of developing both its goals and its theoretical foundations.<sup>66</sup> Anthropology--and particularly the anthropology of Franz Boas and his Columbia group--rested on the premise that so-called "primitive" cultures had much to teach Western man about himself and his relationship to the rest of the world. Cross-cultural studies like Boas' The Mind of Primitive Man emphasized the social and cultural similarities between races rather than their differences.<sup>67</sup> And fundamental to the new science of anthropology was the premise that peoples could not be ranked in a hierarchy of ability or merit. This was the very antithesis of the doctrine of Aryan superiority, and acceptance of Nazi racism necessarily entailed a rejection of the bulk of anthropological science as it existed in the United States in the '30's and '40's.

Many anthropologists recognized that they were fighting for their professional lives when they attacked the tenets of bio-

logical racism. They saw Nazi racism as a deliberate perversion of anthropology, and this view added special vehemence to their protests. In 1940, Ruth Benedict declared: "I believe that those of us who are anthropologists should expose the travesty of sober anthropological material which racism offers."<sup>68</sup> The American Ethnological Association called the doctrine of racial inequality a "distortion of anthropology,"<sup>69</sup> and the American Anthropological Association protested what it termed "the conscription and distortion of anthropology in many countries to serve the cause of an unscientific racialism."<sup>70</sup> These are but a few of the comments to be found in the literature which support the idea that anthropologists did indeed feel threatened by Nazi racism.

## VII.

Such motivating factors as the ones discussed above prove to be useful tools with which we can begin to make sense out of the very different responses of geneticists and anthropologists to Nazi race propaganda. Scientific data on race certainly provided no mandate, by itself, for opposition to the Nazis, as is evidenced by the pleas of ignorance which recur so frequently in scientists' writings on racism during the years of the Third Reich. Until the outbreak of the Second World War, American public opinion was in no way a motivator of scientific attacks on racism abroad, as Americans were divided in a myriad of ways over sensitive race problems at home. In fact, public opinion seems to have discouraged some American scientists from issuing blanket condemnations of racism during the early years of Nazi rule.

Only factors peculiar to the scientific disciplines them-

selves--their respective histories, structures, and theoretical foundations--give rise to the sorts of imperatives which might lead to public criticism of Nazi racial hygiene. As far as geneticists were concerned, we have seen that those who launched the bulk of the attacks made on Nazi racism comprised a rather small group. Geneticists' arguments against the Nazis were more often based on politics than on genetics, and not one society of geneticists issued a public condemnation of Nazi race doctrines between 1933 and 1945. This pattern of response makes sense for several reasons. First, by 1933, geneticists had succeeded in their conscious effort to abandon the "academically suspect" area of human genetics and eugenics for highly rewarding studies involving more manageable research populations and studies at the cellular level. Thus, their concerns in the area of heredity were far removed from those of the Nazis, and few American geneticists could have looked to their own work for refutation of Nazi claims about race even if they had wanted to do so. Secondly, a majority of those geneticists who did speak out were predisposed to such protest by personal interests (e.g., politics, eugenics) which had little to do with the science of genetics itself. And finally, the legitimacy of that well-respected science was in no way threatened by Nazi assertions about race. Fundamentally, there were no compelling reasons for protest against Nazi racism that all American geneticists would have shared, and so the absence of protest at an organizational level is not surprising.

Anthropologists were seen to react differently to the same problem. Criticisms of Nazi racism came from a larger group of

professional anthropologists than geneticists, and these criticisms were often based on anthropological definitions of such terms as "race", "Aryan", and "culture". In addition, protests from anthropologists tended to be more vehement than those of their colleagues in genetics. And two major American anthropological organizations had issued public condemnations of Nazi race principles by the time the Nazis fell from power. Based on premises which were diametrically opposed to those of Nazi racists, anthropology was directly threatened by Nazi claims and made use of anthropological principles in an effort to repudiate those claims. Nazi concerns were anthropological concerns, and so for anthropologists, the fight against Nazi racism was not merely an issue of social conscience but an issue of professional legitimacy and survival.

\* \* \* \*

When the War ended and Nazism released its hold on Germany, many in the United States felt that the victory of the Allies had dispelled the last vestiges of the master-race myth. But as the excitement of victory died away, Americans found themselves facing the same race problems and the same uncertainties about racial equality that they had carried with them into the War. Disillusioned with "scientific" attempts to deal with the issue of racial inequality, the 1944 meeting of the American Association for the Advancement of Science discussed the need to abandon a eugenic approach to race and instead, to concentrate world reconstruction efforts on solving the pressing political, social,



and economic problems which hindered world peace and harmony.<sup>71</sup>  
But scientific justifications for supposed racial inequalities  
have cropped up often in the years since World War II.

Even the horror of Nazi atrocities was not sufficient to  
exorcise the spectre of science from racism.

FOOTNOTES

<sup>1</sup>M.F. Ashley Montagu, Man's Most Dangerous Myth (New York: Columbia University Press, 1942), p. x.

<sup>2</sup>See, for example, Paul Diepgen, Geschichte der Medizin (Berlin: de Gruyter, 1959).

<sup>3</sup>Human Heredity (New York: Macmillan, 1931), trans. Eden and Cedar Paul, 3rd ed. This is a direct translation of the 1927 German edition.

<sup>4</sup>Birth Control Review, 17 (January, 1933), 19-21.

<sup>5</sup>Baur, et al., Human Heredity, p. 209.

<sup>6</sup>Baur, et al., p. 660.

<sup>7</sup>Baur, et al., p. 678.

<sup>8</sup>Hans Harmsen, "The German Sterilization Act of 1933," Eugenics Review, 46 (1954), 227.

<sup>9</sup>Ibid.

<sup>10</sup>Edward M. East, Mankind at the Crossroads (New York: Charles Scribner's Sons, 1924), p. 351.

<sup>11</sup>"Are There Genetically Based Mental Differences Between the Races?", Science, 68 (December 21, 1928), 628.

<sup>12</sup>"Race Mixture and Physical Disharmonies," Science, 71 (June 13, 1930), 605-6. See also, C.B. Davenport and M. Steggerda, Race Crossing in Jamaica (Carnegie Institution of Washington, 1929), Pub. No. 395; and C.B. Davenport, "Some Criticisms of 'Race Crossing in Jamaica'," Science, 72 (November 14, 1930), 501-2.

<sup>13</sup>Mark H. Haller, Eugenics (New Brunswick, N.J.: Rutgers University Press, 1963), pp. 136-7.

<sup>14</sup>(New York: Charles Scribner's Sons, 1924).

<sup>15</sup>(New York: McGraw-Hill, 1931), 2nd ed., pp. 306-7.

<sup>16</sup>Review of Human Heredity in Birth Control Review, 17 (January, 1933), 19-21.

<sup>17</sup>op. cit., p. 20.

<sup>18</sup>Baur, op. cit., p. 21.

<sup>19</sup>Lancelot Hogben, Genetic Principles in Medicine and Social Science (New York: Alfred A. Knopf, 1932), pp. 169-70.

<sup>20</sup>"Not a 'Perfect Man' in Haldane's Utopia," New York Times, 15:1 (August 29, 1932).

<sup>21</sup>"Haldane Derides Nazi Racial Tenet", New York Times, August 4, 1934, 13:8, a report of an address to the Congress of Anthropological and Ethnological Sciences; and Science, 82 (November 15, 1935), supplement no. 2133, p. 7, for a report of his Halley Street Lecture.

<sup>22</sup>Harper's Magazine, 170 (May, 1935), 698.

<sup>23</sup>We Europeans (New York: Harper and Brothers, 1936), p. 232.

<sup>24</sup>Huxley and Haddon, op. cit., p. 223.

<sup>25</sup>Quoted from an address before the Eugenics Research Association, New York Times, June 3, 1938, 23:4.

<sup>26</sup>Science, 95 (February 6, 1942), supplement, p. 36.

<sup>27</sup>"Heredity and Human Affairs: Some Considerations on Modern Problems in Genetics," Forum, 92 (August, 1934), 118-21.

<sup>28</sup>Lawrence H. Snyder, "The Study of Human Heredity," Scientific Monthly, 51 (December, 1940), 536-41.

<sup>29</sup>For such abstract discussions at a time when Nazi racial hygienic practices were widely publicized, see Theodosius Dobzhansky, "The Race Concept in Biology," Scientific Monthly, 52 (February, 1945), 161-5; and Dobzhansky's book, Genetics and the Origin of Species (New York: Columbia University Press, 1941), 2nd ed.

<sup>30</sup>Man's Most Dangerous Myth (New York: Columbia University Press, 1942), p. 25.

<sup>31</sup>Science, 83 (May 29, 1936), 511-3.

<sup>32</sup>"Professor Ridicules Idea of Super-Race," New York Times, April 28, 1935, IV 12:8.

<sup>33</sup>Hoccon, op. cit., p. 512.

<sup>34</sup>Ibid.

<sup>35</sup>See, for example, Franz Boas, "This Nordic Nonsense," Forum, 74 (October, 1925), 502-11; Ruth Benedict, Race: Science and Politics (New York: Modern Age Books, 1940), chapter 5; "Doctors Purify Blood Components," New York Times, September 16, 1944, 13:1; and W.M. Krogman, "What We Do Not Know About Race," Scientific Monthly, 57 (August, 1943), 97-104.

<sup>36</sup>"Race Crossing and Human Heredity," Scientific Monthly, 39 (December, 1934), 544.

37"Scientist Derides Nazi Racial 'Myth'," New York Times, April 18, 1942, 6:6.

38"This Nordic Nonsense," Forum, 74 (October, 1925), 502-11.

39"Anti-Nazis Plan Campaign," New York Times, June 11, 1936, 2:5.

40New York Times, June 16, 1931, 5:2.

41New York Times, August 1, 1937, 32:1.

42New York Times, September 19, 1939, 28:4.

43"Dr. Boas, 78, Quits in a 'Sick' World," New York Times, July 1, 1936, 26:4.

44Ruth Benedict, Race: Science and Politics (New York: Modern Age Books, 1940), p. 95.

45Man's Most Dangerous Myth (New York: Columbia University Press, 1942), chapters 2, 3, and 4.

46Wilton M. Krogman, "What We Do Not Know About Race," Scientific Monthly, 57 (August, 1943), 97-104.

47Robert Redfeild, "What We Do Know About Race, " Scientific Monthly, 57 (September, 1943), 193.

48Ibid.

49"Intellectual Freedom," Science, 88 (December 16, 1938), 562.

50"Scientists Against Nazis, " New Republic, 97 (December 21, 1938), 188-9.

51Ibid.

51b"Theory of Nazis on 'Aryanism' Is False, Anthropologists Hold," New York Times, December 30, 1938, 8:5-6.

52Report on American Scientific Congress, New York Times, May 18, 1940, 18:1.

53"Scientists Deny Race Superiority," New York Times, November 15, 1942, I 41:1.

54"Papers Read Before the International Congress of Genetics," Science, 90(September 1, 1939), supplement, p. 10.

55"Social Biology and Population Improvement," Nature 144 (September 16, 1939), 521-2.

<sup>56</sup>See also, "Plan for Improving Population Drawn by Famed Geneticists," Science News Letter, 36 (August 26, 1939), 131-3.

<sup>57</sup>Franz Boas, "An Anthropologist's Credo," Nation 147 (August 27, 1938), 201-3.

<sup>58</sup>Science, 83 (May 29, 1936), 512.

<sup>59</sup>J.B.S. Haldane, Heredity and Politics (New York: Norton, 1938), p. 185.

<sup>60</sup>L.C. Dunn, "Cross Currents in the History of Human Genetics," American Journal of Human Genetics 14(1962), 1-13.

<sup>61</sup>Charles Rosenberg, "Charles Benedict Davenport and the Beginning of Human Genetics," Bulletin of the History of Medicine, 35 (1961), 266.

<sup>62</sup>Charles Rosenberg, "Factors in the Development of Genetics in the United States," Journal of the History of Medicine and Allied Sciences, 22 (January, 1967), 36-7.

<sup>63</sup>For a sampling of Muller's Marxist arguments, see H.J. Muller, "The Dominance of Economics over Eugenics," Scientific Monthly, 37 (July, 1933), 40-7.

<sup>64</sup>"Eugenics Program Declared Impracticable at Present," Science News Letter, 34 (July 9, 1938), 22.

<sup>65</sup>Harold Ward, "The Science of Genetics," Living Age, 347 (February, 1935), 552-3.

<sup>66</sup>For an excellent discussion of the growth of anthropology in the first part of this century, see Hamilton Cravens, "American Scientists and the Heredity-Environment Controversy," unpublished doctoral dissertation, University of Iowa, 1969.

<sup>67</sup>In addition to the Boas book (New York: Macmillan, 1938), see Margaret Mead, Co-operation and Competition Among Primitive Peoples (Boston: Beacon Press, 1937).

<sup>68</sup>Ruth Benedict, Race: Science and Politics (New York: Modern Age Books, 1940).

<sup>69</sup>"Scientists Deny Race Superiority," New York Times, November 15, 1942, I 41:1.

<sup>70</sup>"Theory of Nazis on 'Aryanism' is False, Anthropologists Hold," New York Times, December 30, 1938, 8:5-6.

<sup>71</sup>"Minimizes Value of Eugenics in World Reconstruction," New York Times, September 14, 1944, IV 9:7.

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